



ADMINISTRATIVE AMENDMENT
TO MONTANA AIR QUALITY PERMIT

Date of Mailing: December 16, 2019

Name of Applicant: Three Forks Resources, LLC

Source: Utopia Field Station

Location: NW ¼ of the SW ¼ of Section 14, Township 33 North, Range 4 East, Liberty County, Montana

Proposed Action: The Department of Environmental Quality (Department) proposes to issue an Administrative Amendment, with conditions, to the above-named permittee. The permit will be assigned #3226-05. The permittee may appeal the Department's decision to the Board of Environmental Review (Board). A request for hearing must be filed by 12/31/2019. This permit shall become final on 01/01/2020, unless the Board orders a stay on the permit.

Proposed Conditions: See attached.

Procedures for Appeal: The permittee may request a hearing before the Board. Any appeal must be filed before the final date stated above. The request for hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, Montana 59620.

For the Department,

Julie A. Merkel
Permitting Services Section Supervisor
Air Quality Bureau
(406) 444-3626

Troy Burrows
Air Quality Bureau
(406) 444-1452

JM:TMB
Enclosure

MONTANA AIR QUALITY PERMIT

Issued To: Three Forks Resources, LLC
Utopia Field Station
4080 Youngfield St.
Wheat Ridge, CO 80033

Montana Air Quality Permit: #3226-05
Administrative Amendment (AA)
Request Received: 11/25/2019
Department's Decision on AA: 12/16/19
Permit Final:

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Three Forks Resources, LLC (TFR), pursuant to Sections 75-2-204 and 211, Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

Section I: Permitted Facilities

A. Plant Location

The TFR Utopia Field Station is located in the NW¹/₄ of the SW¹/₄ of Section 14, Township 33 North, Range 4 East, in Liberty County, Montana. The facility is located approximately 32 miles east of Shelby and about 10 miles north of Lothair. A complete list of permitted equipment is contained in Section I.A of the Permit Analysis.

B. Current Permit Action

On November 25, 2019, the Department of Environmental Quality (Department) received a letter from Three Forks Resources, LLC requesting that the Department transfer the ownership of MAQP #3226-04 from Omimex Canada, Ltd. to Three Forks Resources, LLC.

Section II: Limitations and Conditions

A. Emission Limitations

1. Emissions from the 500 brake-horsepower (bhp) Caterpillar compressor engine shall be controlled with the use of a Non-Selective Catalytic Reduction (NSCR) unit and an electronic air-to-fuel ratio (AFR) controller. Emissions from the engine shall not exceed the following (ARM 17.8.752):

Oxides of Nitrogen (NO _x ¹)	1.00 lb/hr
Carbon monoxide (CO)	2.21 lb/hr
Volatile organic compound (VOC)	0.88 lb/hr

2. TFR shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over six consecutive minutes (ARM 17.8.304).

¹ NO_x reported as NO₂
3226-05

3. TFR shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304).
4. TFR shall not cause or authorize emissions to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
5. TFR shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.4 (ARM 17.8.749).
6. TFR shall comply with all applicable standards and limitations, reporting, recordkeeping and notification requirements contained in 40 Code of Federal Regulation (CFR) 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, and 40 CFR 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (ARM 17.8.340; ARM 18.7.342; 40 CFR 63, Subpart ZZZZ; and 40 CFR 60, Subpart JJJJ).

B. Testing Requirements

1. TFR shall initially test the 500-bhp Caterpillar compressor engine for NO_x and CO, concurrently, to demonstrate compliance with the NO_x and CO emission limits contained in Section II.A.1. Testing shall continue on an every four-year basis or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.749).
2. All compliance source tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. TFR shall supply the Department with annual production information for all emission points, as required by the Department in the annual Emission Inventory request. The request will include, but is not limited to, all sources of emissions identified in Section I.A. of the Permit Analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the Emission Inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

2. TFR shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include ***the addition a of a new emission unit***, a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in

source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to start-up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

3. All records compiled in accordance with this permit must be maintained by TFR as a permanent business record for at least five years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

Section III: General Conditions

- A. Inspection – TFR shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (Continuous Emissions Monitoring (CEMS), Continuous Emissions Rate Monitoring System (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if the recipient fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving TFR of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740 *et seq.* (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401 *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the source.

- G. Air Quality Operation Fees – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by TFR may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit – Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

Montana Air Quality Permit (MAQP) Analysis
Three Forks Resources, LLC
Utopia Field Station
MAQP #3226-05

I. Introduction/Process Description

A. Permitted Equipment

Three Forks Resources, LLC (TFR) owns and operates a natural gas compressor station that is known as the Utopia Field Station. The Utopia Field Station facility includes the following equipment:

One Caterpillar 500 brake-horsepower (bhp) compressor engine
One 0.25-million British thermal units per hour (MMBtu/hr) Flameco Dehydrator
Three 80 thousand British thermal units per hour MBtu/hr Little Giant heaters

B. Source Description

The Utopia Field Station facility is located in the NW¹/₄ of the SW¹/₄ of Section 14, Township 33 North, Range 4 East in Liberty County, Montana. The facility has two primary purposes. The first purpose is to boost the field gas up to the required pressure in the natural gas transmission system.

The second purpose of the complex is to "dry" the gas as it is being processed. The gas contains some moisture, which must be removed from the system prior to being sent into the transmission system. This is accomplished with a dehydrator, also commonly called a reboiler or glycol unit. The gas is treated with a glycol solution, which absorbs the water in the gas stream. The glycol is then heated to about 300 degrees Fahrenheit (°F) in order to drive off the water and return the glycol. The water that is driven off is released to the atmosphere in the form of steam. Burning natural gas in the dehydrator reboiler generates the heat necessary for this process.

C. Permit History

On November 6, 2002, the Montana Department of Environmental Quality (Department) received a complete Air Quality Permit Application from EnCana Energy Resources, Inc. (EnCana). EnCana notified the Department that they had purchased the natural gas gathering portion of the Utopia Field Station from NorthWestern Corporation (NorthWestern).

The permit action involved two separate tasks. First, the Department issued **MAQP #3226-00** to EnCana for the operation of a 240-bhp Ingersoll Rand compressor engine, a 0.25-MMBtu/hr Lakota dehydrator, and two 0.08 MMBtu per hour Little Giant heaters purchased from Northwestern. In addition, the Lakota dehydrator was correctly identified as a Flameco dehydrator and a 220-bhp Caterpillar compressor engine was added to the facility's permit. Second, Northwestern's MAQP #2756-03 was modified to reflect the removal of the equipment purchased by EnCana. On January 3, 2003, MAQP #3226-00 became final.

On June 5, 2003, the Department received a letter from EnCana requesting that the Department change the corporate name on MAQP #3226-00 from EnCana to EnCana Gathering Services (USA), Inc. (EnCana Gathering). This permitting action changed the corporate name on MAQP #3226-00 and updated the permit with current permit language and rule references used by the Department. **MAQP #3226-01** replaced MAQP #3226-00.

On March 5, 2004, the Department received a letter from Omimex requesting that the Department change the corporate name on MAQP #3226-01 from EnCana Gathering to Omimex Canada, Ltd. (Omimex). The corporate name on MAQP #3226-01 was changed and the permit was updated to reflect current permit language and rule references used by the Department. MAQP #3226-02 replaced MAQP #3226-01.

On September 30, 2005, the Department received a complete Montana Air Quality Permit Application from Omimex. Omimex requested that the Department modify MAQP #3226-02. The modification consisted of installing one 500 brake-horsepower (bhp) natural gas-fired engine for gas compression and the removal of two existing engines, the 220-bhp Caterpillar compressor engine and 240-bhp Ingersol-Rand compressor engine. **MAQP #3226-03** replaced Permit #3226-02.

On October 16, 2012, the Department received a de minimis request for the addition of an 80-Mbtu/hr Little Giant Heater to the permit. **MAQP #3226-04** replaces MAQP #3226-03.

D. Current Permit Action

On November 25, 2019, the Department received a letter from TFR requesting that the Department update the listed owner on MAQP #3226-04 to reflect a change of ownership. The current permitting action changes the ownership from Omimex Canada, Ltd. To Three Forks Resources, LLC (TFR) on Permit #3226-04 and updates the permit to reflect current permit language used by the Department. **MAQP #3226-05** replaces MAQP #3226-04.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and Environmental Assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial quotations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 - General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source test conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

TFR shall comply with all requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than four hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

B. ARM 17.8, Subchapter 2 - Ambient Air Quality, including, but not limited to the following:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standards for PM₁₀

TFR must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 - Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. (1) This rule requires that no person may cause or authorize emissions to be discharged to an outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes. (2) This rule requires that no person may cause or authorize emissions to be discharged to an outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions are taken to control emissions of airborne particulate. (2) Under this rule, TFR shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne Particulate Matter (PM).
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere PM caused by the combustion of fuel in excess of the amount determined by this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow or authorize to be discharged into the atmosphere PM in excess of the amount set forth in this rule.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. (5) Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions. TFR uses pipeline-quality natural gas, which meets this limitation.
6. ARM 17.8.340 Standards of Performance for New Stationary Sources. The owner or operator of any stationary source or modification, as defined and applied in 40 Code of Federal Regulations (CFR) Part 60, New Source Performance Standards (NSPS), shall comply with the standards and provisions of 40 CFR Part 60.
 - a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. The TFR facility is not an NSPS affected source because it does not meet any of the definitions of a natural gas processing plant, as defined in 40 CFR Part 60, Subpart KKK, or any other subpart under 40 CFR Part 60, as the facility was constructed prior to January 20, 1984.
 - c. 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The provisions of this subpart are applicable to owners and operators of stationary spark ignition internal combustion engines (SI ICE) that commence construction after June 12, 2006, where the engines are less than 500 horsepower (hp) and are manufactured on or after July 1, 2008. For the purposes of this subpart, the date that construction commences is the date the engine is ordered. The SI ICE engines associated with MAQP #3226-05 that are

less than 500 hp are potentially subject to the provisions of this subpart depending upon the date of construction and manufacture.

7. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR 63, shall comply with the requirements of 40 CFR 63, as listed below:

- a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to an New Emissions Standard for Hazardous Air Pollutants (NESHAP) Subpart as listed below:
- b. 40 CFR 63, Subpart HH – National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities. Owners or operators of oil and natural gas production facilities, as defined and applied in 40 CFR Part 63 shall comply with the applicable provisions of 40 CFR 63, Subpart HH. In order for a natural gas production facility to be subject to 40 CFR 63, Subpart HH requirements, certain criteria must be met. First, a facility must either process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. Second, the facility must also contain an affected source as specified in paragraphs (b)(1) or (b)(2) of 40 CFR 63, Subpart HH. Finally if the criteria are met, and the exemptions contained in paragraphs (e)(1) and (e)(2) of 40 CFR 63, Subpart HH do not apply, the facility is subject to the applicable provisions of 40 CFR 63, Subpart HH. The facility can be either a major or area source of HAPs. TFR is potentially subject to Subpart HH.
- c. 40 CFR 63, Subpart HHH – National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. This subpart applies to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company), and that are major sources of hazardous air pollutant (HAP) emissions as defined in 40 CFR Part 63.1271. TFR is not a major source of HAP emissions; therefore, this subpart does not apply.
- d. 40 CFR 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines (RICE). The provisions of Subpart ZZZZ established national emission and operating limitations for HAPs emitted from stationary RICE located at major and area sources of HAP emissions, except RICE being tested at a stationary test cell/stand. This subpart also establishes requirements to demonstrate initial and continuous compliance established emission and operating limitations. As an area source of HAPs the RICE operated under MAQP #3226-05 are subject to this subpart.

- D. ARM 17.8, Subchapter 5 - Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper

application fee is paid to the Department. A permit fee is not required for the current permit action because the action is considered an administrative permit change.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; and the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

E. ARM 17.8, Subchapter 7 - Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this subchapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify or use any air contaminant sources that have the Potential to Emit (PTE) greater than 25 tons per year (tpy) of any pollutant. TFR has a PTE greater than 25 tpy of nitrogen oxides (NO_x); therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. TFR was not required to submit an application for the current permit action because the change is considered administrative. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative permit change.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. A BACT determination was not required for the current permit action because there are no new or modified sources permitted as a part of this action.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Statutes and Rules. This rule states that nothing in the permit shall be construed as relieving TFR of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Public Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an Environmental Impact Statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

The TFR Utopia Station is not a major stationary source because it is not a listed source and does not have a PTE greater than 250 tons per year (tpy) of any regulated air pollutant. This determination included emissions from NorthWestern's Utopia Station. Future Prevention of Significant Deterioration (PSD) applicability determinations may also include emissions from NorthWestern's Utopia Station.

G. ARM 17.8, Subchapter 12 - Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tpy of any pollutant;
 - b. PTE > 10 tpy of any one HAP, PTE > 25 tpy of a combination of all HAPs, or a lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tpy of PM with an aerodynamic diameter of 10 microns or less (PM₁₀) in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #3226-05 for TFR, the following conclusions were made:
 - a. The facility's PTE is less than 100 tpy for any pollutant.
 - b. The facility's PTE is less than 10 tpy of any one HAP and less than 25 tpy of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to current NESHAP 40 CFR 63, Subpart ZZZZ.
 - e. This facility is potentially subject to NSPS (40 CFR 40, Subpart JJJJ).
 - f. This source is not a Title IV affected source, nor a solid waste combustion unit.

- g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that the TFR Utopia Station will be a minor source of emissions as defined under Title V. This determination included emissions from NorthWestern's Utopia Station. Future Title V applicability determinations may also include emissions from NorthWestern's Utopia Station.

III. BACT Determination

A BACT determination is required for each new or modified source. TFR shall install on the new or modified source the maximum air pollution control capability, which is technically practicable and economically feasible, except that BACT shall be utilized. A BACT analysis is not required for the current permit action, because the change is considered an administrative amendment.

IV. Emission Inventory

Emission Unit	Air Pollutants (tons/year)					
	PM	PM ₁₀	SO ₂	NO _x	VO C	CO
500-bhp Caterpillar Compressor Engine	0.18	0.18	0.01	4.83	3.86	9.64
0.25-MMBtu/hr Flameco Dehydrator	0.01	0.01	0.00	0.11	0.01	0.09
0.16-MMBtu/hr (total) Heaters (2)	0.01	0.01	0.00	0.07	0.00	0.03
80 MBtu/hr Little Giant Heater	.002	0.02	0.00	0.03	0.00	0.01
Totals	0.202	0.202	0.01	39.24	2.25	10.69

Caterpillar Compressor Engine

Brake Horsepower: 500 bhp
Hours of operation: 8,760 hr/yr

PM Emissions

Emission Factor: 9.50E-03 lb/MMBtu {AP-42, Chapter 3, Table 3.2-3, 7/00}
Control Efficiency: 0.0%
Fuel Consumption: 4.25 MMBtu/hr {Maximum Design}
Calculations: $4.25 \text{ MMBtu/hr} \times 9.50\text{E-}03 \text{ lb/MMBtu} = 0.04 \text{ lb/hr}$
 $0.04 \text{ lb/hr} \times 8,760 \text{ hr/yr} \times 0.0005 \text{ ton/lb} = 0.18 \text{ ton/yr}$

PM₁₀ Emissions

Emission Factor: 9.50E-03 lb/MMBtu {AP-42, Chapter 3, Table 3.2-3, 7/00}
Control Efficiency: 0.0%
Fuel Consumption: 4.25 MMBtu/hr {Maximum Design}
Calculations: $4.25 \text{ MMBtu/hr} \times 9.50\text{E-}03 \text{ lb/MMBtu} = 0.04 \text{ lb/hr}$
 $0.04 \text{ lb/hr} \times 8,760 \text{ hr/yr} \times 0.0005 \text{ ton/lb} = 0.18 \text{ ton/yr}$

NO_x Emissions

Emission factor: 1.0 gram/bhp-hour {BACT}
Calculations: $1.0 \text{ gram/bhp-hour} * 500 \text{ bhp} * 0.002205 \text{ lbs/gram} = 1.10 \text{ lb/hr}$
 $1.10 \text{ lb/hr} * 8,760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 4.83 \text{ ton/yr}$

VOC Emissions

Emission factor: 0.80 gram/bhp-hour {BACT}
Calculations: $0.80 \text{ gram/bhp-hour} * 500 \text{ bhp} * 0.002205 \text{ lb/gram} = 0.88 \text{ lb/hr}$
 $0.88 \text{ lb/hr} * 8,760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 3.86 \text{ ton/yr}$

CO Emissions

Emission factor: 2.0 gram/bhp-hour {BACT}
Calculations: $2.0 \text{ gram/bhp-hour} * 500 \text{ bhp} * 0.002205 \text{ lb/gram} = 2.20 \text{ lb/hr}$
 $2.20 \text{ lb/hr} * 8,760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 9.64 \text{ ton/yr}$

SO₂ Emission

Emission factor: 5.88E-04 lb/MMBtu {AP-42, Chapter 3, Table 3.2-3, 7/00}
Fuel Consumption: 4.25 MMBtu/hr {Maximum Design}
Calculations: $4.25 \text{ MMBtu/hr} * 5.88\text{E-}04 \text{ lb/MMBtu} = 0.003 \text{ lb/hr}$
 $0.003 \text{ lb/hr} * 8,760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.01 \text{ ton/yr}$

Flameco Dehydrator

Fuel Consumption: 0.25 MMBtu/hr
{Information from company}
Hours of operation: 8,760 hr/yr

PM Emissions

Emission Factor: 7.6 lb MMBtu/MMScf {AP-42, Chapter 1, Table 1.4-2, 7/98}
Control Efficiency: 0.0%
Calculations: $0.25 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} = 2.19 \text{ MMScf/yr}$
 $2.19 \text{ MMScf/yr} * 7.6 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.01 \text{ ton/yr}$

PM₁₀ Emissions

Emission Factor: 7.6 lb MMBtu/MMScf {AP-42, Chapter 1, Table 1.4-2, 7/98}
Control Efficiency: 0.0%
Calculations: $0.25 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} = 2.19 \text{ MMScf/yr}$
 $2.19 \text{ MMScf/yr} * 7.6 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.01 \text{ ton/yr}$

NO_x Emissions

Emission Factor: 100 lb/MMScf {AP-42, Chapter 1, Table 1.4-1, 7/98}
Control Efficiency: 0.0%
Calculations: $0.25 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} = 2.19 \text{ MMScf/yr}$
 $2.19 \text{ MMScf/yr} * 100 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.11 \text{ ton/yr}$

VOC Emissions

Emission Factor: 5.5 lb/MMScf {AP-42, Chapter 1, Table 1.4-2, 7/98}
Control Efficiency: 0.0%
Calculations: $0.25 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} = 2.19 \text{ MMScf/yr}$
 $2.19 \text{ MMScf/yr} * 5.5 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.01 \text{ ton/yr}$

CO Emissions

Emission Factor: 84 lb/MMScf {AP-42, Chapter 1, Table 1.4-1, 7/98}
Control Efficiency: 0.0%
Calculations: $0.25 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} = 2.19 \text{ MMScf/yr}$
 $2.19 \text{ MMScf/yr} * 84 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.09 \text{ ton/yr}$

SO₂ Emissions

Emission Factor: 0.6 lb/MMScf {AP-42, Chapter 1, Table 1.4-2, 7/98}
Control Efficiency: 0.0%
Calculations: $0.25 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} = 2.19 \text{ MMScf/yr}$
 $2.19 \text{ MMScf/yr} * 0.6 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.00 \text{ ton/yr}$

Heaters (2)

Fuel Consumption: 0.16 MMBtu/hr {Information from Company}
Hours of operation: 8,760 hr/yr

PM Emissions

Emission Factor: 7.6 lb/MMScf {AP-42, Chapter 1, Table 1.4-2, 7/98}
Control Efficiency: 0.0%
Calculations: $0.16 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} = 1.4 \text{ MMScf/yr}$
 $1.4 \text{ MMScf/yr} * 7.6 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.01 \text{ ton/yr}$

PM₁₀ Emissions

Emission Factor: 7.6 lb/MMScf {AP-42, Chapter 1, Table 1.4-2, 7/98}
Control Efficiency: 0.0%
Calculations: $0.16 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} = 1.4 \text{ MMScf/yr}$
 $1.4 \text{ MMScf/yr} * 7.6 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.01 \text{ ton/yr}$

NO_x Emissions

Emission Factor: 100 lb/MMScf {AP-42, Chapter 1, Table 1.4-1, 7/98}
Control Efficiency: 0.0%
Calculations: $0.16 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} = 1.4 \text{ MMScf/yr}$
 $1.4 \text{ MMScf/yr} * 100 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.07 \text{ ton/yr}$

VOC Emissions

Emission Factor: 5.5 lb/MMScf {AP-42, Chapter 1, Table 1.4-2, 7/98}
Control Efficiency: 0.0%
Calculations: $0.16 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} = 1.4 \text{ MMScf/yr}$
 $1.4 \text{ MMScf/yr} * 5.5 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.00 \text{ ton/yr}$

CO Emissions

Emission Factor: 40 lb/MMScf {AP-42, Chapter 1, Table 1.4-1, 7/98}
Control Efficiency: 0.0%
Calculations: $0.16 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} = 1.4 \text{ MMScf/yr}$
 $1.4 \text{ MMScf/yr} * 40 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.03 \text{ ton/yr}$

SO₂ Emissions

Emission Factor: 0.6 lb/MMBtu {AP-42, Chapter 1, Table 1.4-2, 7/98}

Control Efficiency: 0.0%

Calculations: $0.16 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} = 1.4 \text{ MMScf/yr}$
 $1.4 \text{ MMScf/yr} * 0.6 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.00 \text{ ton/yr}$

80 MBtu/hr Little Giant Heater (80 MBtu converted to .08 MMBtu for Emission Inventory calculations)

Fuel Consumption: 0.08 MMBtu/hr {Information from Company}

Hours of operation: 8,760 hr/yr

PM Emissions

Emission Factor: 7.6 lb/MMScf {AP-42, Chapter 1, Table 1.4-2, 7/98}

Control Efficiency: 0.0%

Calculations: $0.08 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} =$

.7008MMScf/yr

$.7008 \text{ MMScf/yr} * 7.6 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.002 \text{ ton/yr}$

PM₁₀ Emissions

Emission Factor: 7.6 lb/MMScf {AP-42, Chapter 1, Table 1.4-2, 7/98}

Control Efficiency: 0.0%

Calculations: $0.08 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} = .7008$

MMScf/yr

$.7008 \text{ MMScf/yr} * 7.6 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.002 \text{ ton/yr}$

NO_x Emissions

Emission Factor: 94 lb/MMScf {AP-42, Chapter 1, Table 1.4-1, 7/98}

Control Efficiency: 0.0%

Calculations: $0.08 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} = .7008$

MMScf/yr

$.7008 \text{ MMScf/yr} * 94 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.03 \text{ ton/yr}$

VOC Emissions

Emission Factor: 5.5 lb/MMScf {AP-42, Chapter 1, Table 1.4-2, 7/98}

Control Efficiency: 0.0%

Calculations: $0.08 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} = .7008$

MMScf/yr

$.7008 \text{ MMScf/yr} * 5.5 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.00 \text{ ton/yr}$

CO Emissions

Emission Factor: 40 lb/MMScf {AP-42, Chapter 1, Table 1.4-1, 7/98}

Control Efficiency: 0.0%

Calculations: $0.08 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} = .7008 \text{ MMScf/yr}$

$.7008 \text{ MMScf/yr} * 40 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.01 \text{ ton/yr}$

SO₂ Emissions

Emission Factor: 0.6 lb/MMBtu {AP-42, Chapter 1, Table 1.4-2, 7/98}

Control Efficiency: 0.0%

Calculations: $0.08 \text{ MMBtu/hr} * 0.001 \text{ MMScf/MMBtu} * 8,760 \text{ hr/yr} = .7008 \text{ MMScf/yr}$

$.7008 \text{ MMScf/yr} * 0.6 \text{ lb/MMScf} * 0.0005 \text{ ton/lb} = 0.00 \text{ ton/yr}$

V. Existing Air Quality

The facility is located approximately 32 miles east of Shelby, Montana, in the NW¹/₄ of SW¹/₄ of Section 14, Township 33 North, Range 4 East, in Liberty County, Montana. The Department believes that the amount of controlled emissions generated by this project will not exceed any set ambient air quality standard.

VI. Ambient Air Impact Analysis

The Department determined that the impacts from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?

YES	NO	
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

VII. Environmental Assessment

The current permit action is an Administrative Action; therefore, an Environmental Assessment is not required.

Analysis Prepared By: Troy Burrows

Date: December 11, 2019